

CLAIM AMENDMENT

Please amend claims 1, 9, 13, 18, and 21 and add new claims 23 and 24.

Complete Listing of Claims in the Application:

Claim 1 (currently amended): In a switching device, a method of communicating data packets from sending ports to destination ports, the method comprising:

storing in a first stage queue packet-related data from a sending port;
determining from the packet-related data which destination ports are to receive the packet-related data in the first stage queue;
storing in a second stage queue associated with each determined destination port the packet-related data from the first stage queue based on a characteristic of the packet; and
transmitting the packet-related data in the second stage queue to a switch fabric for completing the communication of the data packet from the sending port to each determined destination port.

Claim 2 (original): The method of claim 1 wherein the packet-related data is a pointer to memory and a list of destination ports.

Claim 3 (original): The method of claim 1 including sending the packet-related from the sending port to the first stage queue.

Claim 4 (original): The method of claim 1 wherein the first stage queue includes multiple first queues, and the step of storing the data in the first stage queue comprises storing the data in a specific first queue based on a characteristic of the packet.

Claim 5 (original): The method of claim 1 wherein the packet characteristic is priority.

Claim 6 (original): The method of claim 1 wherein the packet characteristic is network protocol type.

Claim 7 (original): The method of claim 1 wherein the packet characteristic is type of service.

Claim 8 (original): The method of claim 1 wherein the packet characteristic is other than whether the packet is a unicast or multicast type.

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Claim 9 (currently amended): The method of claim 1 wherein each second stage queue includes multiple second queues, and the step of storing the data in the second stage queue comprises storing the data in a specific second queue based on a the characteristic of the packet.

Claim 10 (original): The method of claim 1 wherein the packet-related data is a data packet.

Claim 11 (previously presented): The method of claim 1 wherein the switch fabric is a shared memory switch fabric, and the transmitting comprises using the data to obtain a copy

of the data packet from the shared memory switch fabric to complete communication of the data packet.

Claim 12 (previously presented): The method of claim 1 wherein the switch fabric is a crossbar matrix, and the transmitting comprises using the data to form connections in the matrix so as to communicate simultaneously a copy of the data packet from the sending port to each of the determined destination ports.

Claim 13 (currently amended): In a switching device, apparatus for communicating data packets from sending ports to destination ports, comprising:

D3 a first stage queue storing packet-related data from a sending port;
a second stage queue associated with each of a set of destination ports storing the packet-related data from the first stage queue based on a characteristic of the packet; and
a switch fabric coupled to the second stage queue, the switch fabric using the packet-related data in the second stage queue for transmitting the data packet to a destination port.

Claim 14 (original): The apparatus of claim 13 including means for determining from the packet-related data which destination ports are to receive the packet-related data in the first stage queue.

Claim 15 (cancelled)

Claim 16 (original): The apparatus of claim 13 including address resolution logic sending the packet-related data from the sending port to the first stage queue.

Claim 17 (original): The apparatus of claim 13 wherein the first stage queue includes multiple first queues, the data stored in a specific first queue based on a characteristic of the packet.

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Claim 18 (currently amended): The apparatus of claim 13 wherein each second stage queue includes multiple second queues, the data stored in a specific second queue based on a the characteristic of the packet.

Claim 19 (original): The apparatus of claim 13 wherein the switch fabric is a shared memory switch fabric for communicating data packets from sending ports to destination ports.

Claim 20 (previously presented): The apparatus of claim 13 wherein the switch fabric is a crossbar matrix for communicating data packets from sending ports to destination ports.

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Claim 21 (currently amended): In a switching device, apparatus for communicating data packets from sending ports to destination ports, comprising:
 means for storing in a first stage queue packet-related data from a sending port;

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means for determining from the packet-related data which destination ports are to receive the packet-related data in the first stage queue;
means for storing in a second stage queue associated with each determined destination port the packet-related data from the first stage queue based on a characteristic of the packet; and
means for transmitting the packet-related data in the second stage queue to a switch fabric for completing the communication of the data packet from the sending port to each determined destination port.

Claim 22 (previously presented): In a switching device, a method for communicating data packets from sending ports to destination ports, the method comprising:

storing in a first stage queue a pointer to memory
storing a data packet and a list of destination ports;
identifying a destination port stored in the first stage queue;
retrieving the pointer to memory stored in the first stage queue;
storing in a second stage queue associated with the identified destination port the retrieved pointer to memory; and
using the pointer to memory in the second stage queue to complete the communication of the data packet from the sending port to the identified destination port.

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Claim 23 (new): The method of claim 22, wherein the first stage queue includes multiple first queues, and the step of storing the pointer to memory in the first stage queue

comprises storing the pointer in a specific first queue based on a characteristic of the packet.

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Claim 24(new): The method of claim 22, wherein the second stage queue includes multiple second queues, and the step of storing the retrieved pointer to memory in the second stage queue comprises storing the retrieved pointer in a specific second queue based on a characteristic of the packet.